

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/561,691A

Source: IFWP

Date Processed by STIC: 1/11/07

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 01/11/2007

PATENT APPLICATION: US/10/561,691A

TIME: 10:51:37

Input Set : A:\36759-20005.00.TXT

Output Set : N:\CRF4\01112007\J561691A.raw

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4 <110> APPLICANT: Kazakov, Sergei, A.
5      Dallas, Anne
6      Kuo, Tai-Chih
7      Johnston, Brian H.
9 <120> TITLE OF INVENTION: Polynucleotides Capable of
10      Target-Dependent Circularization and Topological Linkage
12 <130> FILE REFERENCE: 367592000500
14 <140> CURRENT APPLICATION NUMBER: 10/561,691A
15 <141> CURRENT FILING DATE: 2005-12-21
17 <150> PRIOR APPLICATION NUMBER: PCT/US2004/020589
18 <151> PRIOR FILING DATE: 2004-06-25
20 <150> PRIOR APPLICATION NUMBER: US 60/482,653
21 <151> PRIOR FILING DATE: 2003-06-25
23 <160> NUMBER OF SEQ ID NOS: 49
25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 74
29 <212> TYPE: DNA
30 <213> ORGANISM: Artificial Sequence
32 <220> FEATURE:
33 <223> OTHER INFORMATION: Synthetic Construct
35 <400> SEQUENCE: 1
36 cgtccgatatg acgagagaag ctgaccagag aaacacacga cgtaagtcgt ggtacattac 60
37 ctggtaacag aggc                                     74
39 <210> SEQ ID NO: 2
40 <211> LENGTH: 69
41 <212> TYPE: DNA
42 <213> ORGANISM: Artificial Sequence
44 <220> FEATURE:
45 <223> OTHER INFORMATION: Synthetic Construct
47 <400> SEQUENCE: 2
48 tgttgttgtt gttgttgttg tgcctatgct tcagcctctg ttaccaggta atgtaccacg 60
49 acttacgctc                                         69
51 <210> SEQ ID NO: 3
52 <211> LENGTH: 51
53 <212> TYPE: DNA
54 <213> ORGANISM: Artificial Sequence
56 <220> FEATURE:
57 <223> OTHER INFORMATION: Synthetic Construct
59 <400> SEQUENCE: 3
60 taatacgact cactataggg cagccgtcct cgtccgatatg acgagagaag c      51
62 <210> SEQ ID NO: 4
63 <211> LENGTH: 45

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64 <212> TYPE: DNA
65 <213> ORGANISM: Artificial Sequence
67 <220> FEATURE:
68 <223> OTHER INFORMATION: Synthetic Construct
70 <400> SEQUENCE: 4
71 tatgacgagg acggctgggt gttgttggtg ttgttggtgt tgtgc 45
73 <210> SEQ ID NO: 5
74 <211> LENGTH: 45
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Synthetic Construct
81 <400> SEQUENCE: 5
82 tatgacgagg acggctgatt gttgttggtg ttgttggtgt tgtgc 45
84 <210> SEQ ID NO: 6
85 <211> LENGTH: 45
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
89 <220> FEATURE:
90 <223> OTHER INFORMATION: Synthetic Construct
92 <400> SEQUENCE: 6
93 tatgacgagg acggctgagt gttgttggtg ttgttggtgt tgtgc 45
95 <210> SEQ ID NO: 7
96 <211> LENGTH: 45
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: Synthetic Construct
103 <400> SEQUENCE: 7
104 tatgacgagg acggctgaga gttgttggtg ttgttggtgt tgtgc 45
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 45
108 <212> TYPE: DNA
109 <213> ORGANISM: Artificial Sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: Synthetic Construct
114 <400> SEQUENCE: 8
115 tatgacgagg acggctgaga cttgttggtg ttgttggtgt tgtgc 45
117 <210> SEQ ID NO: 9
118 <211> LENGTH: 45
119 <212> TYPE: DNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Synthetic Construct
125 <400> SEQUENCE: 9
126 tatgacgagg acggctgaga catgttggtg ttgttggtgt tgtgc 45
128 <210> SEQ ID NO: 10
129 <211> LENGTH: 17
130 <212> TYPE: DNA

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131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Synthetic Construct
136 <400> SEQUENCE: 10
137 gcttctctcg tcatacg 17
139 <210> SEQ ID NO: 11
140 <211> LENGTH: 28
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Synthetic Construct
147 <400> SEQUENCE: 11
148 taatacgact cactataggg cagccgctc 28
150 <210> SEQ ID NO: 12
151 <211> LENGTH: 29
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Synthetic Construct
158 <400> SEQUENCE: 12
159 ggtgacacta tgatgcatat gacgaggac 29
161 <210> SEQ ID NO: 13
162 <211> LENGTH: 60
163 <212> TYPE: RNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Synthetic Construct
169 <220> FEATURE:
170 <221> NAME/KEY: misc_feature
171 <222> LOCATION: 1-5, 10, 13-19, 27-35, 41-48, 54, 56-60
172 <223> OTHER INFORMATION: n = A, U, G or C
174 <220> FEATURE:
175 <221> NAME/KEY: misc_feature
176 <222> LOCATION: 6
177 <223> OTHER INFORMATION: n = U, C or G
179 <220> FEATURE:
180 <221> NAME/KEY: misc_feature
181 <222> LOCATION: 7, 11, 49
182 <223> OTHER INFORMATION: n = U or C
184 <220> FEATURE:
185 <221> NAME/KEY: misc_feature
186 <222> LOCATION: 8, 25
187 <223> OTHER INFORMATION: n = A, C or U
189 <220> FEATURE:
190 <221> NAME/KEY: misc_feature
191 <222> LOCATION: 12
192 <223> OTHER INFORMATION: n = A or G
194 <220> FEATURE:
195 <221> NAME/KEY: misc_feature

```

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196 <222> LOCATION: (55)...(55) ✓
197 <223> OTHER INFORMATION: n = A, C or G
199 <400> SEQUENCE: 13
W--> 200 nnnnnnnnngn nnnnnnnnnnc auuanannnnn nnnnnncaaag nnnnnnnnnng aagnnnnnnn 60
203 <210> SEQ ID NO: 14
204 <211> LENGTH: 22
205 <212> TYPE: RNA
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Synthetic Construct
211 <400> SEQUENCE: 14
212 guucucuuca agggacaagg cu 22
214 <210> SEQ ID NO: 15
215 <211> LENGTH: 119
216 <212> TYPE: RNA
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: Synthetic Construct
222 <400> SEQUENCE: 15
223 guccuguccg uaugacagag aagucaacca gagaaacaca cguuguggua uauuaccugg 60
224 ucaagagaag uucccuguuc cuuuuuuucc cgagccuugu cccuugaaga gaacugacc 119
226 <210> SEQ ID NO: 16
227 <211> LENGTH: 139
228 <212> TYPE: RNA
229 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: Synthetic Construct
234 <220> FEATURE:
235 <221> NAME/KEY: misc_feature
236 <222> LOCATION: (82)...(101) ✓
237 <223> OTHER INFORMATION: n = A, G, C or U
239 <400> SEQUENCE: 16
240 gggcagccgu ccucguccgu augacgagag aagcugacca gagaaacaca cgacguaagu 60
W--> 241 cgugguacau uaccugguaa cnnnnnnnnn nnnnnnnnnn ngagaauaac aacaacaaca 120
242 acaaccagcc guccuguc 139
244 <210> SEQ ID NO: 17
245 <211> LENGTH: 122
246 <212> TYPE: RNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: Synthetic Construct
252 <220> FEATURE:
253 <221> NAME/KEY: misc_feature
254 <222> LOCATION: (74)...(93) ✓
255 <223> OTHER INFORMATION: n = A, G, C or U
257 <400> SEQUENCE: 17
258 guccugucc guaugacgag agaagcugac cagagaaaca cagcaguaa gucgugguac 60
W--> 259 auuaccuggu aacnnnnnnn nnnnnnnnnn nnngagaaua aacaacaaca caacaaccag 120
260 cc 122

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Input Set : A:\36759-20005.00.TXT

Output Set: N:\CRF4\01112007\J561691A.raw

262 <210> SEQ ID NO: 18
 263 <211> LENGTH: 142
 264 <212> TYPE: RNA
 265 <213> ORGANISM: Artificial Sequence
 267 <220> FEATURE:
 268 <223> OTHER INFORMATION: Synthetic Construct
 270 <220> FEATURE:
 271 <221> NAME/KEY: misc_feature
 272 <222> LOCATION: (121)...(125)
 273 <223> OTHER INFORMATION: n = A, C, G or U
 275 <400> SEQUENCE: 18
 276 gggcagccgu ccuggaccgu auguccagag aagcugacca gagaaacaca cgacguaagu 60
 277 cgugguacau uaccugguaa cagaggcuga gacauaggca caacaacaac aacaacaaca 120
 W--> 278 nnnnncagcc guccucguca ua 142
 280 <210> SEQ ID NO: 19
 281 <211> LENGTH: 10
 282 <212> TYPE: RNA
 283 <213> ORGANISM: Artificial Sequence
 285 <220> FEATURE:
 286 <223> OTHER INFORMATION: Synthetic Construct
 288 <400> SEQUENCE: 19
 289 ugucucagcc 10
 291 <210> SEQ ID NO: 20
 292 <211> LENGTH: 10
 293 <212> TYPE: RNA
 294 <213> ORGANISM: Artificial Sequence
 296 <220> FEATURE:
 297 <223> OTHER INFORMATION: Synthetic Construct
 299 <400> SEQUENCE: 20
 300 agucucagcc 10
 302 <210> SEQ ID NO: 21
 303 <211> LENGTH: 10
 304 <212> TYPE: RNA
 305 <213> ORGANISM: Artificial Sequence
 307 <220> FEATURE:
 308 <223> OTHER INFORMATION: Synthetic Construct
 310 <400> SEQUENCE: 21
 311 acucucagcc 10
 313 <210> SEQ ID NO: 22
 314 <211> LENGTH: 10
 315 <212> TYPE: RNA
 316 <213> ORGANISM: Artificial Sequence
 318 <220> FEATURE:
 319 <223> OTHER INFORMATION: Synthetic Construct
 321 <400> SEQUENCE: 22
 322 acacucagcc 10
 324 <210> SEQ ID NO: 23
 325 <211> LENGTH: 10
 326 <212> TYPE: RNA

RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; N Pos. ~~1,2,3,4,5,6,7,8,10,11,12,13,14,15,16,17,18,19,25,27,28,29~~
Seq#:13; N Pos. ~~30,31,32,33,34,35,41,42,43,44,45,46,47,48,49,54,55,56,57,58~~
Seq#:13; N Pos. ~~59,60~~
Seq#:16; N Pos. 82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100
Seq#:16; N Pos. 101
Seq#:17; N Pos. ~~74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93~~
Seq#:18; N Pos. ~~121,122,123,124,125~~

VERIFICATION SUMMARY

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L:200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:60
L:259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:60
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:120